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09/587,892	06/06/2000	Ramesh Nagarajan	12	8023

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EXAMINER

NGUYEN, TOAN D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/587,892

Applicant(s)

NAGARAJAN, RAMESH

Examiner

Toan D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-7, 10-12, 14-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pekarske (U.S. Patent 5,146,452).

For claim 1, Pekarske discloses method and apparatus for rapidly restoring a communication network, the method comprising the steps of:

routing a given traffic demand from a first network element to a second network element (col. 12 lines 44-51); and

processing the traffic demand in the second network element such that a copy of a signal associated with the demand is at least one of: (i) retained at the second network element, while the signal is routed to at least one additional network element (col. 12 lines 57-63); and (ii) routed to at least one additional network element, while the signal is routed to at least one network element other than the additional network element (col. 12 lines 60-68).

Pekarske does not explicitly disclose copy of a signal associated with the demand. However, the claim does not further define what the signal is and the traffic demand can be broadly interpret as a signal itself. Therefore, it would have been obvious to one of ordinary skill in the art to broadly interpret the replicate of search signature as the claimed copy of signal associated with the traffic demand.

For claim 2, Pekarske discloses wherein the first network element comprises a source network element of the traffic demand (col. 12 lines 44-51).

For claim 3, Pekarske discloses wherein the second network element comprises an element of a ring-type transport (figure 5, col. 4 lines 64-68).

For claim 5, Pekarske discloses wherein the copy of the signal associated with the demand is generated and retained at the second network element and the signal continues on to another network element (col. 12 lines 57-68).

For claim 6, Pekarske discloses wherein a copy of the signal is generated at each of a set of multiple network elements including the second network element (col. 12 lines 57-68).

For claim 7, Pekarske discloses wherein the copy of the signal associated with the demand comprises at least a portion of a multicast of the signal generated by the second network element and multicast to at least two other network elements (figure 2, col. 4 line 59 to col. 4 line 6 and col. 12 lines 57-68).

For claim 10, Pekarske discloses method and apparatus for rapidly restoring a communication network, the apparatus comprising:

a given network element coupled to one or more additional network elements (col. 12 lines 42-44) and operative to process a traffic demand received from one of the additional network elements such that a copy of a signal associated with the demand is at least one of: (i) retained at the given network element, while the signal is routed to at least one of the additional network elements (col. 12 lines 57-63); and (ii) routed to at least one of the additional network elements, while the signal is routed to at least one network element other than the one of the additional network elements (col. 12 lines 60-68).

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Pekarske does not explicitly disclose copy of a signal associated with the demand. However, the claim does not further define what the signal is and the traffic demand can be broadly interpret as a signal itself. Therefore, it would have been obvious to one of ordinary skill in the art to broadly interpret the replicate of search signature as the claimed copy of signal associated with the traffic demand.

For claim 11, Pekarske discloses wherein the traffic demand is received at the given network element from a source network element of the traffic demand (col. 12 lines 44-51).

For claim 12, Pekarske discloses wherein the given network element comprises an element of a ring-type transport (figure 5, col. 4 lines 64-68).

For claim 14, Pekarske discloses wherein the copy of the signal associated with the demand is generated and retained at the given network element and the signal continues on to another network element (col. 12 lines 57-68).

For claim 15, Pekarske discloses wherein a copy of the signal is generated at each of a set of multiple network elements including the given network element (col. 12 lines 57-68).

For claim 16, Pekarske discloses wherein the copy of the signal associated with the demand comprises at least a portion of a multicast of the signal generated by the given network element and multicast to at least two other network elements (figure 2, col. 4 line 59 to col. 4 line 6 and col. 12 lines 57-68).

For claim 19, Pekarske discloses method and apparatus for rapidly restoring a communication network, the apparatus comprising:

a first network element (col. 12 lines 42-44); and

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a second network element coupled to the first network element (col. 12 lines 60-63), the first network element routing a given traffic demand to the second network element (col. 12 lines 44-51), the second network element processing the traffic demand such that a copy of a signal associated with the demand is at least one of (i) retained at the second network element, while the signal is routed to at least one additional network element (col. 12 lines 57-63); and (ii) routed to at least one additional network element, while the signal is routed to at least one network element other than the additional network element (col. 12 lines 60-68).

Pekarske does not explicitly disclose copy of a signal associated with the demand. However, the claim does not further define what the signal is and the traffic demand can be broadly interpret as a signal itself. Therefore, it would have been obvious to one of ordinary skill in the art to broadly interpret the replicate of search signature as the claimed copy of signal associated with the traffic demand.

3. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pekarske (U.S. Patent 5,146,452) in view of Chng et al. (U.S. Patent 5,435,003).

For claims 4 and 13, Pekarske does not disclose wherein the second network element comprises an element of a mesh-type transport. In an analogous art, Chng et al. disclose wherein the second network element comprises an element of a mesh-type transport (col. 1 lines 51-54). Chng et al. disclose further wherein the given network element comprises an element of a mesh-type transport (col. 1 lines 51-54 as set forth in claim 13).

One skilled in the art would have recognized of a mesh-type transport to use the teachings of Chng et al. in the system of Pekarske. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the mesh-type transport as taught by

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Chng et al. in Pekarske's system with the motivation being to perform distributed restoration (col. 1 lines 50-54).

4. Claims 8-9 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pekarske (U.S. Patent 5,146,452) in view of Byrne (U.S. Patent 6,229,787 B1).

For claims 8-9, 17 and 18, Pekarske does not disclose wherein the second network element is an element of a set of dual homed network elements. In an analogous art, Byrne discloses wherein the second network element is an element of a set of dual homed network elements (figure 4, col. 4 lines 60-63). Byrne discloses further wherein the at least one additional network element is an element of a set of dual-homed network elements (col. 4 lines 60-63 as set forth in claim 9); wherein the given network element is an element of a set of dual-homed network elements (col. 4 lines 60-63 as set forth in claim 17); and wherein at least one of the additional network elements is an element of a set of dual-homed network elements (col. 4 lines 60-63 as set forth in claim 18).

One skilled in the art would have recognized the second network element is an element of a set of dual homed network elements to use the teachings of Byrne in the system of Pekarske. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the second network element is an element of a set of dual homed network elements as taught by Byrne in Pekarske's system with the motivation being to provide two physical connections for switch/router (col. 4 lines 52-54).

Contact Information

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D Nguyen whose telephone number is 703-305-0140. The examiner can normally be reached on Monday- Friday (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 703-308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

Toan D. Nguyen

Toan D. Nguyen